

REF

Volume 7, No. 48

November 28, 1979



- Oil-price hike subject of First Ministers' Meeting, 1
- Parti Québécois loses seats in provincial by-elections, 3
- Canada reaffirms pledge to participate in United Nations' goals, 3
- Science park new link with Britain, 4
- Judges' robes make history, 4
- Increase of immigrants, 4
- International body to fend for family farms, 5
- Canada funds college, 5
- Damaged documents saved by freeze-drying, 6
- Lubricant extraction method, 6
- Gold rush strikes Quebec, 6
- Cloud-watching uncovers new theory, 6
- News of the arts — exhibition, 7
- News briefs, 8

Oil-price hike subject of First Ministers' Meeting

The Federal Government's "essential elements to an effective national energy strategy" were enumerated by Prime Minister Joe Clark at a meeting of First Ministers in Ottawa, November 12, convened to negotiate a new pricing agreement between Ottawa and the producing provinces.

Mr. Clark said that the price of oil must be high enough to bring on new sources of supply and that the price regime must provide the industry enough certainty to plan ahead; more effective conservation must be encouraged; the substitution of cheaper and more plentiful fuels must be accelerated and the use of oil reduced; and the proportion of Canadian ownership, particularly in new ventures, must be increased.

Canadian consumers had been sheltered from world oil market realities by a policy that subsidized their use of oil, said the Prime Minister. Each barrel of oil bought abroad now costs Canada between \$25 and \$35 a barrel. The price paid directly by Canadian refiners is about \$16. The difference is subsidized.

Those using domestic oil are subsidized by the producers and the producing provinces, especially Alberta. The cumulative subsidy to Canadian oil consumers is now approaching \$20 billion. The United States, he continued, which pursued similar price restraint policies, had now decided to move its oil price to world levels by September 30, 1981. "That," said Mr. Clark, "removes an important barrier to sensible pricing decisions in Canada."

Oil price proposals

The Federal Government proposed that prices rise by \$4 a barrel a year until Canadian prices reach a level of about 90 per cent of the so-called Chicago price (the blended price of U.S. domestic and imported oil). Premier William Davis of Ontario opposed any increase beyond what had been already agreed upon — \$1 a barrel on January 1 and another \$1 a barrel on July 1, 1980. Alberta's Premier Peter Lougheed agreed with Ottawa about raising prices by scheduled increases to the "Chicago price".

Late news

As this issue went to press, former Prime Minister Pierre Trudeau announced that he was stepping down as Leader of the Liberal Party of Canada. Mr. Trudeau will continue as Leader of the Opposition in the House of Commons until a new leader is named, probably in the spring. The next issue of *Canada Weekly* will carry more details.

INTERNATIONAL AFFAIRS
 AFFAIRES EXTERIEURES
 OTTAWA
 DEC 10 1979
 LIBRARY / BIBLIOTHEQUE



Prime Minister Clark (second from left) consults with provincial representatives.

Nov. 28/79

Laurie Grocott / Ejournal / Affaires

Prime Minister Clark's statement to the House of Commons, reporting on the First Ministers' Meeting, follows:

...Today's discussion centred on the proposals put forth by this Government to achieve our goal of making Canada self-sufficient in energy by 1990. Those proposals previously had been the subject of extensive consultation between Ottawa and the provinces, and I believe the positive tone of discussions today reflected the value of frank and extensive consultation in a federal system. Sir, that is a pattern we intend to continue.

I am pleased, for our country, to be able to report substantial agreement among First Ministers on the major outlines of a comprehensive energy policy for Canada. The First Ministers unanimously endorsed our central goal of energy self-sufficiency. We agreed it is dangerous to the economic future of our country to ignore a situation where so many Canadians, especially in Quebec and in Atlantic Canada, are dependent on unreliable foreign oil supplies.

Price to be negotiated

The important element of price remains to be negotiated. As I told the conference, that is, jurisdictionally, a decision for the producing provinces and the national government, but we wanted to take the pricing decision only after we had the opportunity to hear from other parts of Canada, and know how price increases would affect those regions. I was impressed by the realism of First Ministers in recognizing that, while price increases are never easy, the consequences of failing to act would be much more serious for Canada. They would expose us to supply interruptions which could devastate the economy of Canada and could leave Canada relying upon unstable foreign sources of oil — sources which simply cannot be counted on. Against that background we will be meeting representatives of the producing provinces this week to seek a pricing *régime* for oil and natural gas, designed to increase Canada's ability to supply our own oil and gas, to encourage conservation, and to encourage substitution of alternate fuels.

...We proposed a special tax on incremental oil company profits to help finance Canadian energy development. Officials of our Government will be consulting with provinces and the industry to design the most effective tax.

We proposed a Canadian energy bank to help Canadians invest in long term and essential Canadian energy projects. Several provinces, I am pleased to report, have agreed to take a look at contributing equity financing to that bank. The Federal Government itself expects to contribute about \$1.5 billion to equity, over the next four years, to help build Canada's energy potential.

Officials will also meet to identify conservation projects where work can begin immediately. I indicated our intention to propose a co-operative program to help individuals retrofit oil-burning furnaces. We would be prepared to contribute to an industrial energy conservation program in Atlantic Canada. Regarding home insulation, several provinces have indicated that local needs would be better served if the Canadian Home Insulation Program, CHIP, were under provincial control, and we are prepared to work out arrangements under which CHIP would be transferred, together with increased federal funding.

New initiatives

First Ministers strongly supported the need for new initiatives to encourage increased substitution of more plentiful energy sources for oil. Particular attention was given to the opportunity for expanded natural gas markets in Ontario, Quebec and perhaps the Maritime provinces, but there was also recognition of the other sources available in particular regions, for example, greater use of wood waste in British Columbia, increased coal production in Nova Scotia, further hydro development in Manitoba, Quebec and Newfoundland, and expanded development of renewable energy sources across the country. Officials of federal and provincial governments are beginning work immediately to identify areas where substitution can start in 1980.

We have also discussed with First Ministers means to help Canadians who will be least able to deal with price increases, and to deal with other specific problems. Those measures will be dealt with either in the federal budget, or in connection with the next First Ministers' conference which has been rescheduled for December 17 and 18. That change in date will allow officials to conclude the work flowing from today's conference, and will allow First Ministers to also deal with other matters....

In general, Mr. Lougheed said that if Alberta obtained what it considered a fair price for its oil, it would co-operate in accelerated oil-sands development and the substitution of abundant natural gas supplies for depleting oil. If prices for Alberta and Saskatchewan oil did not move closer to the world price to encourage further exploration for and development of energy resources, Canada could find itself importing 30 per cent of its oil by 1985, said Mr. Lougheed. Imports now account for about 16 per cent of domestic consumption.

Oil company profits

The Federal Government proposed an energy self-sufficiency tax which would

give companies 45 per cent of the first \$1-a-barrel increase, then tax away all but 5 per cent of any revenues caused by additional price increases. The money would be used for energy-related projects. Mr. Davis believed that company profits were already high enough to finance future exploration and development, while Mr. Lougheed would like companies to keep receiving 45 per cent of all oil revenues, provided they reinvested a large proportion searching for new energy supplies.

Saskatchewan Premier Allan Blakeney said that the multinational oil companies should not get any additional revenue from an increase in the old oil. Every additional cent paid by Canadians for old

oil beyond royalties and taxes, he said, should go towards developing new sources of energy owned by Canadians.

Energy bank

Mr. Clark proposed creation of an energy bank, financed by equity and loans provided by the Federal Government and the ten provincial governments. It would invest money in energy-related projects. Mr. Davis liked the general idea of an energy bank, provided that some of the producing provinces' oil and gas revenues were invested in the bank. Mr. Lougheed was non-committal about the idea of an energy bank, saying he wanted to study it further.

(Continued on P. 8)

Parti Québécois loses seats in provincial by-elections

Liberal candidates won all three Quebec by-elections held November 14, the eve of the third anniversary of the Parti Québécois' election as a government in the province.

The by-elections took place in the ridings of Maisonneuve in Montreal, Beauce-Sud, southeast of Quebec City, and Prevost outside Montreal.

The ridings contested represented three gains for the Liberals. Two had been held by the Parti Québécois and the third, Beauce-Sud, was won in the 1976 election by Fabien Roy, who resigned to become leader of the federal Social Credit Party.

"The results clearly come as a very severe verdict and a hard blow for our party and for our government," Quebec Premier René Lévesque told the National Assembly. "Even if the voice of the people is hard to accept it's obvious that we can't deny the message," he said. "There is a very clear message of dissatisfaction...and more than a mere warning or reprimand." Mr. Lévesque cited the "social climate" including inflation and a recent round of public service strikes for the party's defeat in the by-elections. He

repeated that the results would not reflect on the outcome of next spring's referendum on sovereignty-association.

Many observers considered the by-elections to be the last chance for the Parti Québécois to determine its support before next spring's planned referendum on Quebec's future.

"The people have categorically rejected the PQ's constitutional option and the white paper they had the impudence to release," said Liberal Leader Claude Ryan. "Quebecers want a more open attitude to the rest of Canada, to fundamental freedoms and to the economic climate," he added.

However, Prime Minister Joe Clark said that while he viewed the by-election results as a "triumph of federalist forces" he did not see them as a vote for the constitutional *status quo*.

An editorial in the *Montreal Gazette*, November 16, warned: "The plain fact is that we still face a tense and difficult winter and spring in which Quebecers will be carefully watching the attitudes and behaviour of English Canada. Mr. Ryan is on solid ground when he insists that the

renewal of federalism is still urgent national business."

In Maisonneuve, Liberal Georges Lalonde defeated PQ candidate Jacques Desmarais by 4,000 votes. The seat had been a Parti Québécois stronghold since they first contested it in 1970. The seat was left vacant this summer when former PQ Cabinet Minister Robert Burns retired for health reasons.

Liberal candidate Hermann Mathieu won by more than 2,000 votes over Raymond Boisvert of the Parti Québécois in the Beauce-Sud riding. In Prevost, Solange Chapat-Rolland defeated PQ candidate Pierre Harvey by 9,000 votes.

The results of the by-elections mean the Parti Québécois government has now lost all six by-elections held since it was elected to office in 1976. The Liberals have won more than 60 per cent of the vote in each riding. The by-election victories, however, do not affect the PQ's comfortable 68-seat majority in the National Assembly. The Liberals hold 29 seats, the Union Nationale, which did not officially field any candidates for the recent by-elections, have nine elected members, with three independents and one vacancy accounting for the remaining seats in the National Assembly.

Canada reaffirms pledge to participate in United Nations' goals

Canada will work to foster disarmament, to ease the plight of refugees and to solve the problem of poverty, Secretary of State Flora MacDonald pledged in a letter to the Secretary-General of the United Nations Kurt Waldheim on United Nations' Day, October 24.

In her letter marking the thirty-fourth anniversary of the founding of the United Nations, Miss MacDonald said "the Government and people of Canada would pay special attention to the efforts of the United Nations in its pursuit of the general goal of disarmament". Canada will continue "to participate actively in the negotiation of multilateral disarmament agreements within the framework of the United Nations," she added.

Miss MacDonald said that Canadians also shared the concern for the humanitarian problem in Indochina and "will support any initiative to seek a political solution through negotiation to the whole Indochina problem".

The major task confronting the UN for the rest of this century, the Minister said,

was "to solve the problem of poverty; thereby providing enough material goods to ensure health and dignity to all. Canada will continue to give close attention to the efforts of the UN as it strives to reach this goal".



Paul-Emile Cardinal Léger (left) shows Pearson Peace medal to his brother, former Governor-General Jules Léger during ceremony at Government House.

Medal to Cardinal Léger

In Ottawa, the United Nations Association in Canada marked United Nations' Day by awarding the Pearson Peace Medal to Paul-Emile Cardinal Léger in recognition of his outstanding services to Canada, the peace of the world and the United Nations. The award is presented annually by the association in honour of the late former Prime Minister Lester B. Pearson. The medal, which was presented to Cardinal Léger by Governor-General Edward Schreyer at Rideau Hall, is awarded to a Canadian "who through voluntary effort, has personally most contributed to those causes for which Lester B. Pearson stood: aid to the developing world, mediation between those confronting one another with arms, succor to refugees and others in need and peaceful change through world law and world organization".

Science park new link with Britain

A research and development park in Alberta may provide an opportunity for closer industrial, scientific and financial links between Canada and Britain, the British High Commissioner to Canada, Sir John Ford, said in a speech at the recent opening of the park.

The High Commissioner read a message from Cambridge University, England, whose Science Park will establish a link with the new Edmonton Research and Development Park.

Dr. Harry Gunning, former president of the University of Alberta and now chairman of the Edmonton Research and Development Park, said that as Canada's economic balance continued to move westward, "we see dramatic opportunities to serve the needs of high technology as required by a new global-sized petrochemical industry and in the areas of sophisticated electronic and telecommunication installations".

The initial site of 620 acres is expected to be expanded to twice that size at the park's completion, making it the largest research park in Canada. The park will draw upon more than 5,000 University of Alberta science students for research.

In his speech, Sir John said that although, "Britain's record recently in productivity has been bad, its record in innovation has been remarkable. Britain is still in the van in many sectors of technology and British businessmen and administrators still have vast experience in dealing with foreign governments and peoples. Alberta can buy that experience and can attract it here in the form of joint-venture operations".

In 1973, Trinity College in Cambridge set up its own science park to turn inventions into profitable business: one-half of its product is exported outside Britain including lasers, electron optic systems, veterinary vaccines and research metals.

Stanford Research Institute International of Menlo, California, was selected to do initial research for the park on methods of management, land pricing policy, marketing, development controls, physical planning guidelines, methods of financing and size. The first industrial park, the Stanford Industrial Park at Palo Alto, California, was established by Stanford University in 1951. More than 70 firms now occupy the site, providing jobs for some 17,000 people.

Judges' robes make history

For the first time in Canadian history, Supreme Court judges are wearing Canadian-made ceremonial robes.

When the Supreme Court of Canada was created in 1875, robes for the Supreme Court Justices were made in Britain from "Monks cloth" because by tradition the King's laws were administered by local monks prior to the Magna Carta. The original robes, worn by Canadian Supreme Court Justices, were copied from those worn by Royal Court Justices in Britain. The odd robe, which required replacement was made of baize cloth, essentially the type of material used on billiard tables.



Chief Justice Bora Laskin wears new ceremonial robes.

However, because most of the robes needed to be replaced, Chief Justice Bora Laskin approached Supply and Services Canada to enquire about a replacement.

A bright red barathea cloth made by Dominion Woollens, Montreal for the Department of National Defence was chosen for the robes. Although traditionally trimmed with Russian ermine, the Canadian gowns were trimmed with white mink supplied by the Canadian Mink Breeders' Association.

The robes, which were traditionally bought only from a century-old British firm, were made and supplied by Harcourts Limited of Toronto, Ontario under contract to Supply and Services Canada. Harcourts, a 137-year-old firm, makes al-

most 90 per cent of all judicial gowns in Canada.

President David Cooper of Harcourts personally delivered the first robe to Chief Justice Laskin.

The old robes being replaced were used over the years by many different justices, most of whom had their initials inscribed on the robes' facing. It is likely that the old robes will probably be donated to museums across the country.

Increase of immigrants

Canada will increase by 20,000 the number of immigrants it will allow into the country next year, Employment and Immigration Minister Ron Atkey announced in a recent report to Parliament on immigration levels.

The 1980 immigration figure includes some 27,000 Indochinese refugees remaining in the Government's 50,000 commitment for 1979 and 1980 made earlier this year. The increase over the 100,000 level established in 1979 is attributable to the special refugee program whereby the Government sponsors one refugee for every one brought to Canada by private sponsors, explained Mr. Atkey.

"This does not mean that other parts of the immigration program will be cut back. Nor will refugee intake be cut back. We will err on the side of generosity if more than the expected number of Southeast Asian refugees are sponsored in 1980 as a result of the Government's special program," the Minister said.

"Family and independent immigration will not be reduced in 1980, because of the special refugee program and the principle of family reunification will continue to govern the admission of close family members," said Mr. Atkey. "But it will be equally important to increase the proportion of immigrants selected according to the needs of the Canadian labour market."

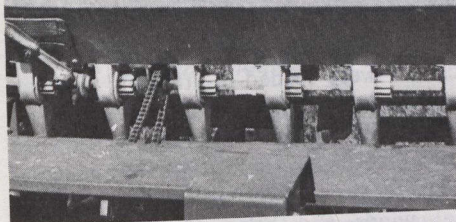
Immigrants destined to the labour market do not displace Canadian workers, but are chosen to provide job skills when no domestic workers are available. The report points out that the Federal Government is "committed to the principle that it is preferable, wherever possible, to employ or train Canadians for Canadian jobs, rather than to admit workers from abroad". The report also outlines federal programs for job replacement, mobility and training to boost job opportunities for Canadian workers.

International body to fend for family farms

An innovative consultation on problems facing the family farm that recently brought together farmers and farm leaders from developing countries, Canada, the United States and Europe to discuss ways of overcoming threats to the farmer's way of life has resulted in plans to form what consultation organizers believe will be a unique international farm organization, reports Sharleen Bannon editor of *Development Directions*.



"G-100" Disker



Delegates from developing countries visit a Saskatchewan wheat farm during the international consultation on family farms. (Left to right): Tom Ahima from Ghana and Daniel Macheмба from Tanzania.

The group now struggling to establish itself as an organization grew out of a coordinating committee with representatives from North America, the Caribbean, Africa, South America and Asia; the body was elected by delegates at the conclusion of a two-week consultation which began in Regina, Saskatchewan, travelled to Quebec City and ended with six days of deliberation at the University of Prince Edward Island in Charlottetown, September 1.

The objectives of the new organization are to facilitate the formation and continuation of an international exchange network of contacts, information and expertise among farm organizations that work directly with farming families.

The new body also intends to bring to the attention of governments the importance of the family farm in ensuring na-

tional food self-sufficiency. The committee foresees that the organization will try to persuade policy-makers not to encourage the growth and exclusive reliance on large-scale, mechanized agricultural production and to consider that the small-scale farm may — especially in these days of energy shortages — prove even more productive and efficient.

The Canadian International Development Agency (CIDA) and Inter Pares — an Ottawa-based non-governmental organization involved in Third World agriculture projects — have been approached to help form the organization which would probably have its headquarters in a Third World country. The official host for the family farms consultation was the Prince Edward Island-based Institute of Man and Resources with financial assistance and co-operation from CIDA and the provinces of Saskatchewan, Quebec and Prince Edward Island. Inter Pares served as the secretariat for the consultation.

Participants

All delegates were invited as individuals rather than as official representatives for their country or organization. All had practical experience in farming. Third World participants came from Antigua, Bangladesh, Bolivia, Cameroun, Dominica, Ecuador, Ghana, India, Kenya, Liberia, Mexico, Philippines, Puerto Rico,



Quebec farmer Celine Caron explains how maple syrup is made during a visit to a Quebec sugar bush by delegates to the consultation.

Senegal, Sri Lanka, St. Vincent, Tanzania, Thailand, Togo, Trinidad, Upper Volta, and Zambia. The Europeans were from Denmark, France, England, Ireland, Italy and Scotland. There were also Canadian farmers from Alberta, Quebec, Saskatchewan and the 30 host farmers from Prince Edward Island.

Debate and discussion centred around such topics as international market forces detrimental to small-scale farming, why certain crops are produced to benefit others than the farmer or the local community, the role of the state in relation to farm land and agricultural policies, agribusiness, technology, transnational corporations and land holding patterns.

Despite many differences in the crops and in methods of farming in the various countries represented at the meeting, there was universal agreement that the farmer receives a relatively small return on his investment and his family's labour, compared with the profits made by others in the market-place dependent on the farmer's produce.

Canada funds college

Canada is providing a \$12-million grant to help construct a natural resources college in Malawi.

The funds will be used to help design, construct and equip a training facility for about 700 students near the capital, Lilongwe. The college will offer courses in such subjects as farm management; crop, animal and land husbandry; fisheries; national parks; wildlife management; and veterinary science.

The total cost, including the Malawi contribution, is estimated at \$14.1 million.

The five-year plan is Canada's first involvement in this area of Malawi's development and is designed to integrate four existing training facilities. All teachers and administrative staff will be Malawians. Canadian involvement will be limited to the establishment of the building — including student dormitories — and initial organization of the college.

Canadian development assistance to Malawi amounted to \$15.8 million in grants during 1978-79 and is one of the largest Canadian International Development Agency programs in Commonwealth Africa. Until recently, Canadian activity in Malawi has been focused on transportation, particularly railways.

Damaged documents saved by freeze-drying

A spice company in Halifax has used its freeze-drying equipment to restore water-damaged church documents to a legible condition.

When the Brunswick Street United Church burned to the ground last June, its birth, death, marriage and financial records, dating back to the early 1800s, suffered considerable damage.

Alice Harrison, librarian at the Atlantic School of Theology, said the records were freeze-dried in a vacuum chamber owned by W.H. Schwartz and Sons Ltd., the Maritime provinces' major spice supplier.

The company uses the chamber — known as an ethylene oxide vacuum sterilizer — to keep its spices bacteria-free by injecting vaporized ethylene oxide along with steam.

Lubricant extraction method

A Canadian researcher described a breakthrough in lubricant extraction technology in Romania recently, that would increase savings and productivity in petroleum plants.

B.M. Sankey one of only 13 people invited to give a "special paper" at the World Petroleum congress in Bucharest, outlined the EXOL-N process developed at Imperial Oil Limited laboratories in Sarnia, Ontario.

Mr. Sankey described how EXOL-N can provide more product at less cost and with less oil input than older processes.

He said the experience of Imperial and its parent company Exxon with the Canadian process showed why so many of the 5,000 delegates at the 70-country conference were so keenly interested in it.

In addition to substantial operating savings, he said, "we saved many tens of millions of dollars in new plant investment".

The new process provided Exxon and its subsidiaries with greatly increased capacity at existing plants, removing the need to build new plants to serve growing markets.

Exxon and not Imperial, however, owns the process. J.L. Tiedje, manager of Imperial's research department, explained that the Exxon group of companies pool all research.

EXOL-N is being used at seven Exxon plants throughout the world, including one at Edmonton, and Exxon now is turning its attention to selling the process.

The speech by Mr. Sankey providing the first public description of the process in scientific details, would allow others to develop it on their own. Mr. Tiedje said. But it would be less costly, quicker, and generally "more sensible" to buy Exxon's complete details and engineering help.

EXOL-N, Mr. Sankey said, may wholly replace the two solvents, phenol and furfural currently used in lubricants extraction.

Phenol is highly toxic, causing serious burns on skin contact, while furfural is unstable at higher temperatures and much of it is lost when it reacts with oil and decomposes.

Among the additional efficiencies available with EXOL-N, he says, are net energy savings of 20 to 30 per cent and the ability to make repairs during operations because of a far higher safety factor.

Answering questions from a number of delegations, Mr. Sankey said the cost of NMP, the key ingredient in the process, was much higher than the two existing solvents. In the United States, phenol costs 35 cents a pound, furfural 55 to 60 and NMP \$1. But the advantages in productivity and energy savings far outweighed the cost, he said.

Gold rush strikes Quebec

Soaring gold prices, which have produced a mining boom in northwestern Quebec, are expected to add \$100 million to the regional economy this year, says the president of the Quebec Metal Mining Association.

Gonzague Langlois said that association statistics showed that the value of mining production in the region last year was \$202 million, with gold mines accounting for half that amount.

A dozen gold and copper mines were slated to open within two to three years, creating more than 2,500 jobs, he added.

The Abitibi-Temiscamingue region of northwestern Quebec produces 99 per cent of the gold mined in the province.

In the past four years, four new gold mines have come into production — the Darius and Thomson Bousquet mines in Cadillac, the Chadbourne mine in Noranda and the Belmorale mine in Val d'Or.

During 1980, the Bras d'Or, Kena and Kewegama mines owned by Silverstack Mines will come into production. The Quebec government-owned mining exploration corporation, SOQUEM, has a 50 percent holding in Silverstack.

In copper mining, Hudson Bay Mining and Smelting Co. Ltd. and Selco Mining Corp. Ltd., both of Toronto, have formed a joint venture to work a rich vein north of Joutel. Investments are estimated at \$80 million and are expected to create 300 jobs, said Mr. Langlois.

Cloud-watching uncovers new theory

Some long-term implications for air safety may result from studies on cloud turbulence, which are a spin-off from cloud-seeding experiments, that have been conducted for the past five years, by the National Research Council (NRC), in co-operation with the Atmospheric Environment Service of Fisheries and Environment Canada.

Using three NRC aircraft in the Thunder Bay, Ontario, and Yellowknife, North West Territories areas, summer cumulus clouds were seeded in attempts to determine rain-making capabilities for the purpose of fighting forest fires. During the experiments, measurements were made of the life, turbulence, vertical and horizontal winds and other characteristics of these clouds. Because seeding is done at the topmost layers of the clouds, numerous profiles were developed of the activity and characteristics of this zone.

In addition to the general information about upper cloud physics, researchers discovered cumulus clouds that possess differing characteristics in various areas of the country. Clouds in the Thunder Bay area, for example, showed more vertical development, higher moisture content and greater turbulence than their northern counterparts.

Because Canada's major airlines cross the country along the southern area, this finding could have an impact on commercial flight patterns. Differences in cloud dynamics between various locations may have implications for aircraft and pilot safety in other seeding operations as well as for private and other small aircraft. With continuing investigations, researchers expect to be able to produce a cloud "atlas" for Canada in the near future, which would be beneficial to all aircraft operators.

News of the arts

Treasures of Tutankhamun exhibit opens in Toronto

Canada is playing host to a boy king who reigned only nine years but the memory of him may live forever.



Gold mask of Tutankhamun was placed over the head and shoulders of mummy.

The treasures of Tutankhamun's tomb, some 55 selected pieces from the 5,000 found in the Valley of the Nile by Howard Carter in 1922, are displayed in the Art Gallery of Ontario (AGO), Toronto until the end of this year. This is the only Canadian showing of these priceless objects before being moved to Germany for exhibition. The Canadian presentation grew out of negotiations begun in 1976 between the National Museums of Canada and the Organization of Egyptian Antiquities.

In spite of the great wealth of his tomb's artifacts, Tutankhamun remains a king whose history can be traced only in broken outline. He reigned from 1334 to 1325 B.C. during the Eighteenth Dynasty, one of the most glorious periods of Egypt's long history. The achievements of his short reign were the return to worship of traditional gods, beginning the re-establishment of Egypt's military and political might and restoration of the aristocracy to its position of wealth, security and power. His early death at 18 apparently caught his court unprepared for his own tomb was not finished and he was buried in a smaller tomb intended for some lesser dignitary.

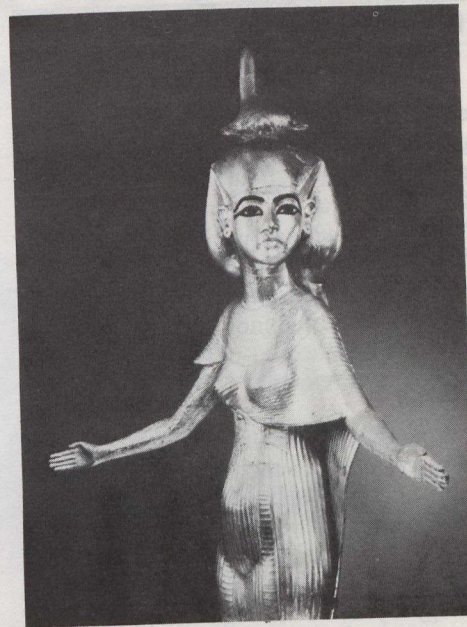
The AGO has spent \$1.8 million in

mounting this exhibit which will be seen by some 800,000 persons, including 100,000 Ontario students. An American Express Canada Inc. grant of \$100,000 is the largest exhibition grant ever received by the AGO.

Representing the fabled treasures are 55 of the most beautiful objects, 22 of which have never before been out of Egypt.

One of the articles on display, which is considered by some to be the most remarkable effigy in the history of man, is the 10.7-kilogram gold mask of Tutankhamun made of gold, inlaid with carnelian, lapis lazuli, coloured glass and quartz. This solid gold mask was placed over the head and shoulders of Tutankhamun's mummy. Its features appear to be a likeness of the king. The cobra and vulture, symbols of royalty, adorn the striped headdress, while a false beard of divinity is attached to the chin. Engraved on the shoulders and back, in gold, is a spell in hieroglyphs from the *Book of the Dead*.

Other great works of art and intricate jewellery include the gilded wooden statue of the Goddess Selket, Tutankhamun with a harpoon, a small gold shrine, vulture necklet and earrings. Vivid decorations abound on wooden chests and shrines which show the king at leisure, hunting or with his queen, Ankhesena-

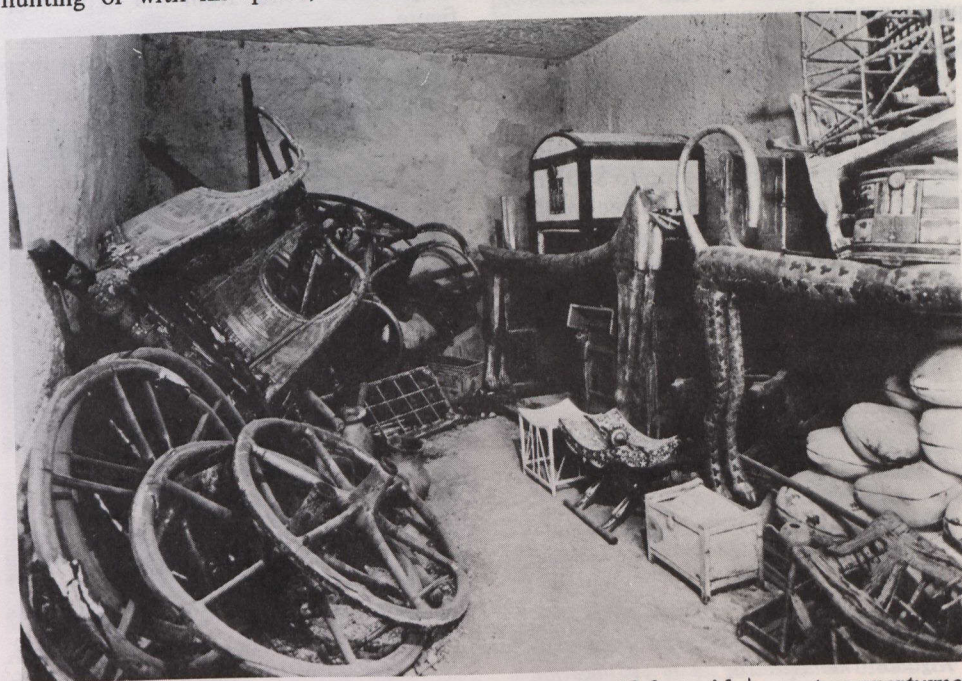


Wood statuette of the Goddess Selket.

mun. There are brilliant images of animals, birds and insects, articles and furniture used by Tutankhamun — like his child's chair and his golden dagger.

The objects are arranged in approximately the order in which they were excavated from the four rooms; the Antechamber, the Burial Chamber, Treasury and the Annex. In the corridors are photographs taken on the site by Harry Burton of the Metropolitan Museum during the ten-year excavation.

(Article by Walford Reeves.)



The largest objects in the antechamber (20 feet long by 12 feet wide) were two overturned chariots, which were too big to be brought into the chamber without being dismantled.

First Ministers (Cont'd from P. 2)

Mr. Clark proposed an increase in the excise tax on gasoline by up to 30 cents a gallon, from the present seven cents, to promote conservation and to raise money for the federal treasury. Mr. Davis strongly opposed such an increase, calling it inflationary and an unjustifiable additional burden on consumers. Mr. Lougheed neither supported nor opposed the rise as long as the excise tax did not diminish provincial revenues.

Substantial agreement

In a statement to the House of Commons following the First Ministers' conference, Mr. Clark said that the meeting had yielded "substantial agreement" on the need to make Canada self-sufficient in energy by 1990 through increased domestic production, conservation and substitution of alternative sources to replace oil. He flew to Alberta and Saskatchewan to meet with Mr. Lougheed and Saskatchewan Premier Allan Blakeney the same week, to negotiate a rise in the domestic price of oil from its present level towards the world level, probably following the formula amounting to a \$4-a-barrel increase each year. He also discussed the proposal to levy a special tax on industry profits over the authorized level to be used for energy-related programs.

News briefs

The Alberta Oil Sands Technology and Research Authority and Gulf Canada Resources Inc. plan to spend up to \$90 million to test a new method of recovering oil from oil sands, says *Canada Report*. The authority and Gulf have signed a letter of intent to test a new drilling system involving the use of horizontal wells. A two-year, \$8-million engineering study

Canada Weekly is published by the External Information Programs Division, Department of External Affairs, Ottawa, K1A 0G2.

Material may be freely reprinted. A credit would be appreciated. Photo sources, if not shown, will be provided on request to (Mrs.) Miki Sheldon, Editor.

Cette publication existe également en français sous le titre Hebdo Canada.

Algunos números de esta publicación aparecen también en español bajo el título Noticiario de Canadá.

is to be carried out initially to determine the feasibility of the project. If a decision is made to go ahead, an additional \$82 million will be spent on a seven-year field test.

The University of Victoria has become the first university in British Columbia to offer credit courses *via* satellite. The program links students to instructors through two-way audio hookups while viewing lectures on TV monitors in five locations in B.C. The two-way audio hookup allows the students to directly question the course instructor during the lecture, creating a sense of class participation, says Dr. Martin. About 60 students, most of them high school principals and school board officials, are participating in the program, a course on supervision being beamed to Prince George, Port Alberni, Dawson Creek, Cranbrook and Terrace *via* the *Anik-B* satellite. Whitehorse in the Yukon is also able to receive the satellite transmission.

Food prices rose at a slower rate from September to October, helped by lower prices for fresh and processed fruit and poultry, Agriculture Canada recently announced. The department's monthly food-at-home index increased by 0.2 per cent from September 14 to October 19 and is 13 percent higher than it was a year ago. The cost of a diet to meet the nutritional requirements of a family of four was \$61.12 a week in October, a drop of 24 cents from the September figure.

Consolidated-Bathurst Inc. is the first company to receive a grant under a Canada-Quebec program designed to help modernize the pulp and paper industry. The \$5.5-million grant will be used to help build a \$24.7-million pulp mill at the company's Laurentide division in Grand'Mère, Quebec. The company said that when the plant was completed in the spring of 1980, it would produce sulphite pulp used in the manufacture of newsprint. (Source: *Canada Report*.)

A huge ethylene-manufacturing plant was opened recently on a 150-acre site in Joffre, Alberta. Built at a cost of \$370 million by Alberta Gas Ethylene Co. Ltd. of Calgary, the plant has been in operation since early August. It has a manufacturing capacity of 544,000 metric tons or 1.2 billion pounds of ethylene a year.

The Montreal *Star* closed down on September 25 after 110 years of publication. The *Star*, an afternoon English-language daily, lost the seven-and-a-

half-month "war" with the morning *Gazette* that began February 12, when the *Star* resumed publication after an eight-month strike.

The Export Development Corporation (EDC) and the Bank of Montreal have concluded a \$5.1-million financing agreement to support the sale of steel rails by Sydney Steel Corporation, Sydney, Nova Scotia, to Mexico. The loan, to Nacional Financiera S.A. (Nafinsa), supports the sale of 12,500 tonnes of steel rails and related accessories to two state-owned railways, Ferrocarril de Chihuahua al Pacifico S.A. de C.V. and Ferrocarriles Unidos del Sureste S.A. de C.V. The rails will be used for the rehabilitation of existing track as part of the upgrading of the Mexican railway system. Nafinsa is the Mexican national development bank. The EDC said the sale would generate some 260 man-years of employment in Canada.

At least 108 narwhals had to be killed on Baffin Island recently, after a wall of ice suddenly formed and trapped them as they were feeding in Agu Bay on Baffin Island. The whales would have slowly starved to death or suffocated under the ice, said a Federal fisheries officer.

Projects involving 163 senior citizens groups across Canada will receive federal contributions totalling \$839,999, Health and Welfare Minister David Crombie has announced. The funds are made available through the department's New Horizons program.

British Columbia ended the past fiscal year March 31 with a surplus of more than \$200 million, according to provincial finance minister Evan Wolfe. Mr. Wolfe said a 104 percent increase in forest revenue left the provincial government with a surplus of \$213 million.

What a difference a comma and three zeros can make. Adele Coutts of Toronto, who has never won anything in her life, checked her winning Wintario lottery ticket and thought she had won \$10. "I was thrilled," she said. "I always knew I'd win something." She showed the three numbers to her ticket agent, collected her prize and bought a blouse with her winnings. A few days later a Wintario official telephoned and said their computer had caught a mistake. Mrs. Coutts's ticket had contained five of the winning numbers. That meant she had just won \$10,000. Mrs. Coutts was asked to give back the \$10 she'd originally collected before she received her \$10,000 cheque. Mrs. Coutts said she did not mind at all.